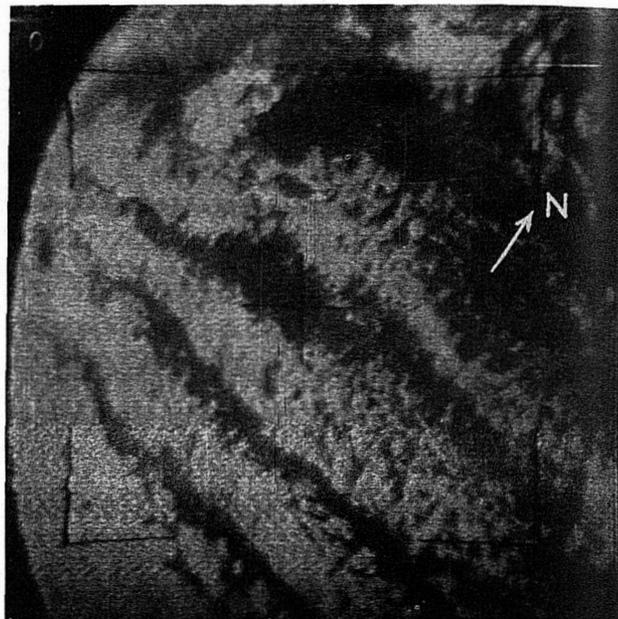


PICTURE OF THE MONTH



These two TIROS III photographs, both received via tape mode at Wallops Station, Va., were taken about 2 months and 5,000 miles apart. Each shows strikingly large parallel bands over low-latitude, Southern Hemisphere ocean areas; and in both cases the bands are oriented very nearly east-west, with the width of each band of the order of 150 miles.

The picture on the left (pass 199/198, frame 7, 0620 GMT, July 26, 1961) was taken over the southern Indian Ocean northeast of Madagascar which is somewhere near the horizon to the left. The bands lie in the general area bounded by 50° and 70° E. and by 8° and 20° S.

In the picture on the right (pass 1121/1120, frame 3, 1203 GMT, Sept. 28, 1961) the bands are in the area between 5° and 15° S. and between 5° and 30° W.—almost

midway between Africa and South America. The Brazilian coast lies beyond the horizon to the left of this picture. Although the later TIROS III pictures, such as this one, suffered considerable image degradation, it still is possible to see that the bands are composed of numerous smaller cumuliform aggregates.

According to climatological averages, the Intertropical Convergence Zone should be north of the equator in July and September, and it is probable that these bands south of the equator and at low latitudes are in easterly or southeasterly winds about the periphery of an anticyclone—clearly not any familiar synoptic model.

What is the nature of this remarkable tropical convergence?